

What is claimed is:

1. A cooling structure for electronic devices  
wherein

a plurality of electronic device accommodating boxes in which electronic devices are accommodated are accommodated in a casing in multiple stages,

a vent portion which allows ventilation between the inside and the outside of the casing is formed in a ceiling of the casing,

in a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, a hollow duct having two opening faces is arranged,

the first opening face faces the vent portion,

the second opening face faces a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling,

air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and

air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct.

2. A Cooling structure for electronic devices according to claim 1 wherein discharging device for discharging air inside the casing outside is arranged in the vent portion, and air inside the first and second electronic device accommodating boxes is discharged outside the casing by the discharging device.

3. A cooling structure for electronic devices according to claim 2 wherein the discharging device and the first opening face are spaced apart from each other.

4. A cooling structure for electronic devices according to claim 1 wherein a shape of the duct is configured to include a portion in which an area of an imaginary opening face which is imaginary formed of a cross section parallel to the second opening face is increased as the cross section approaches the second opening face.

5. A cooling structure for electronic devices according to claim 4 wherein two first electronic device accommodating boxes are accommodated in the first accommodating portion in an opposed manner such that two first electronic device accommodating boxes sandwich the duct,

the imaginary opening face has a substantially rectangular shape,

the second opening face has one side thereof set to a length substantially equal to a width of the first electronic device accommodating box and another side thereof set to a length substantially equal to a distance between opposing faces of two first electronic device accommodating boxes which face each other.

6. A cooling structure for electronic devices according to claim 1 wherein two first electronic device accommodating boxes are accommodated in the first accommodating portion in an opposed manner such that two first electronic device accommodating boxes sandwich the duct,

two second electronic device accommodating boxes are accommodated in the second accommodating portion in an opposed manner such that two second electronic device accommodating boxes face lower portions of the first electronic device accommodating boxes in an opposed manner,

resistance plates which adjust an air volume by having vent holes are arranged on respective faces of two first electronic device accommodating boxes in an opposed manner, and

resistance plates which adopt a standard equal to a standard of the resistance plates and have vent holes equal to the vent holes of the resistance plates are arranged on respective faces of two second electronic device accommodating boxes in an opposed manner.

7. A cooling structure for electronic devices according to claim 1 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board which performs inputting and outputting of data with respect to the disc drives.

8. A cooling structure for electronic devices according to claim 2 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board which performs inputting and outputting of data with respect to the disc drives.

9. A cooling structure for electronic devices according to claim 3 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board

which performs inputting and outputting of data with respect to the disc drives.

10. A cooling structure for electronic devices according to claim 4 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board which performs inputting and outputting of data with respect to the disc drives.

11. A cooling structure for electronic devices according to claim 5 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board which performs inputting and outputting of data with respect to the disc drives.

12. A cooling structure for electronic devices according to claim 6 wherein the electronic devices accommodated in the first electronic device accommodating boxes are disc drives, and

the electronic devices accommodated in the second electronic device accommodating boxes are a control board which performs inputting and outputting of data with respect to the disc drives.

13. A cooling structure for electronic devices according to claim 1 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.

14. A cooling structure for electronic devices according to claim 2 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.

15. A cooling structure for electronic devices according to claim 3 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.

16. A cooling structure for electronic devices according to claim 4 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.

17. A cooling structure for electronic devices according to claim 5 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.

18. A cooling structure for electronic devices according to claim 6 wherein the electronic devices accommodated in the first and second electronic device accommodating boxes are disc drives.